



# ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

## AIR QUALITY TITLE V PERMIT

**COMPANY:** *All American Pipeline Company*  
**FACILITY:** *HOT SPRINGS PUMP STATION*  
**PERMIT #:** *1000178*  
**DATE ISSUED:** *DRAFT*  
**EXPIRY DATE:**

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### SUMMARY

This operating permit is issued to All American Pipeline Company (AAPL), the Permittee, for operation of their Hot Springs Pump Station located in Cochise County, Arizona.

The Hot Springs Pump Station is one of a series of pump stations designed to transport crude oil from California to Texas. The optimal design flow rate of crude oil through the pipeline is 300,000 barrels per day (bpd). The facility is located in Cochise County, 24 miles west-northwest of Wilcox and north of interstate 10; the area has been designated attainment or unclassified for National Ambient Air Quality Standards for criteria pollutants.

Permitted equipment at the facility consists of **three natural gas fired Solar Centaur turbines** and **two G.C. Broach natural gas fired heaters**. Of the three turbines, the facility is permitted to operate only two turbines at any given time except for 15 minutes to switch to the third turbine. Heaters are used to decrease the viscosity of the crude oil. These heaters are rarely fired, as the incoming crude oil is already relatively low in viscosity. Primary electric power for the facility is purchased. Neither the turbines nor the heaters are equipped with pollution control devices. The facility is permitted to operate 24 hours a day and 365 days a year.

Table 1 summarizes the requirements for operation of equipment emitting emissions in significant quantities. Activities generating insignificant quantities of air emissions for which there are no applicable requirements are listed in Attachment "E".

The Hot Springs Pump Station is automated, remotely controlled and is primarily an unattended location. All records relating to this permit may be kept at All American Pipeline Company, 220 North William Dillard Drive, Gilbert, Arizona 85233.

All terms and conditions of this permit are enforceable by the Administrator of the United States Environmental Protection Agency (U.S.EPA). This permit cites only the current state rules. The rules in the State Implementation Plan (SIP) have been renumbered but the language in the current rules is either more stringent or is the same. Only Rule R9-3-527.C. has been included in this permit from the SIP because this rule was substantially different. A copy of a rule conformity test between the current rules and the SIP is attached to the technical analysis. AAPL has requested for Custom Fuel Monitoring Schedule for sulfur content monitoring as a second choice. This request has been included in the permit pursuant to EPA memorandum dated August 14, 1987 from John B. Rasnic, Chief of Compliance Monitoring Branch.

The total estimated potential emissions emitted from this facility (excluding insignificant activities) are as follows. These figures are for information purposes only and are not an enforceable limits.

Pollutants	Nitrogen Oxides	Carbon Monoxide	Volatile Organic Compounds	PM <sub>10</sub>	Sulfur Dioxide
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**All American Pipeline Company - Hot Springs Pump Station**

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<b>Emissions</b> (Tons Per Year)	210.48	77.09	5.59	5.06	0.38
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**TABLE 1 Summary of Permit Requirements**

Emission Unit	Pollutants Emitted	Control Measure	Emission Limits / Standards	Monitoring /Recordkeeping	Reporting <sup>1</sup>	Testing / Methods
<b><u>POINT SOURCES</u></b>  <b>P1.</b> Natural Gas Fired Solar Centaur Turbine Stack 1 <b>P2.</b> Natural Gas Fired Solar Centaur Turbine Stack 2 <b>P3.</b> Natural Gas Fired Solar Centaur Turbine Stack 3 <b>(Fuel -Natural Gas)</b>  [ 40CFR60, Subpart A, GG, Installation permit #25009]	SO <sub>2</sub>	- No controls installed	- Fuel - Only combust pipeline quality natural gas  - Sulfur content in fuel < 0.8% by weight.	-Daily sulfur content of fuel <b>OR</b> - Keep a copy of FERC- approved Tariff agreement, where sulfur is 0.017% by weight (5 grains/100 scf) <b>OR</b> - EPA approved custom fuel monitoring schedule - Records of sample analysis and fuel supply if custom fuel monitoring schedule is used.	-Any change in Tariff agreement within 30 days <b>OR</b> - Any change in fuel supply or in fuel quality within 30 days if custom fuel monitoring schedule is used.	--
	NO <sub>x</sub>		$\text{STD} = 0.015 * \frac{(14.4)}{Y} + F$	- Daily nitrogen content of fuel (Requirement waived by EPA)	--	- Annual performance test on each unit for emissions of NO <sub>x</sub> / Method 20
	PM, CO, VOC, HAPs		- Fuel - Only combust pipeline quality natural gas	--	--	--

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	-		<ul style="list-style-type: none"> <li>- Pumping capacity of turbines shall not exceed 70%.</li> <li>- Only two of three turbines shall be operated at any given time except for 15 minutes to switch between units. The number of switches shall not exceed 3,650 per year, based on a 12-month rolling total.</li> </ul>	<ul style="list-style-type: none"> <li>- The quantity of crude oil pumped &amp; percent capacity on a daily basis</li> <li>- Date and times of start-up/stop for each turbine and the number of switches between turbines on a daily basis</li> </ul>	<ul style="list-style-type: none"> <li>- Any increase in pumping capacity over 70%</li> <li>- Semiannual report of the quantity of crude oil pumped &amp; the percent capacity.</li> <li>- Semiannual report of monthly summary of 12-month rolling record of switches between units, including identification of run-up, operation and run-down period by turbine, date and time for each switch</li> </ul>	--
Emission Unit	Pollutants Emitted	Control Measure	Emission Limits / Standards	Monitoring / Recordkeeping	Reporting <sup>1</sup>	Testing / Methods
<b>P4. G.C. Broach</b> TEGHFD-40 Heater Stack 1  <b>P5. G.C. Broach</b> TEGHFD-40 Heater Stack 2 <b>(Fuel -Natural Gas)</b> [R18-2-724, 306.01]	PM	- No controls installed	$E = 1.02 Q^{0.769} \text{ lb/hr}$	- Copy of FERC-approved Tariff agreement, lower heating value $\geq 967 \text{ Btu/ft}^3$	- The opacity of any plume or effluent exceeds 15% in any six-minute periods	--
	Opacity		< 15%	--		Method 9
	CO, NO <sub>x</sub> , HAPs, VOC, SO <sub>2</sub>		- Fuel - Only pipeline quality natural gas	--		--

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<b><u>FUGITIVE SOURCES</u></b>  <b>F1. Non-point Sources</b> [A.A.C. R18-2-610] a. Driveways, parking areas, or vacant lots [A.A.C. R18-2-604.A]	Opacity	Maintain gravel, restricted access 10 MPH speed limit	< 40%	- Maintain gravel, Date of gravel	--	--
b. Open area (Used, altered, repaired, etc.) [A.A.C. R18-2-604.A]	Opacity	Dust suppressants, wetting agents	< 40%	- Date and type of activity performed, Type of control measure used		
c. Construction of roadways [A.A.C. R18-2-605.A]	Opacity	Dust suppressants, wetting agents	< 40%			
d. Material transportation [A.A.C. R18-2-605.B]	Opacity	Covering, dust suppressants , wetting agents	< 40%			
e. Material handling [A.A.C. R18-2-606]	Opacity	Dust suppressants, wetting agents	< 40%			
f. Storage Piles [A.A.C. R18-2-607.A]	Opacity	Covering, dust suppressants, wetting agents	< 40%			
<b>Emission Unit</b>	<b>Pollutants Emitted</b>	<b>Control Measure</b>	<b>Emission Limits / Standards</b>	<b>Monitoring / Recordkeeping</b>	<b>Reporting <sup>1</sup></b>	<b>Testing / Methods</b>
g. Stacking and reclaiming machinery at storage piles [A.A.C. R18-2-607.B]	Opacity	Minimum fall, dust suppressants, wetting agenets	< 40%	- Date and type of activity performed, Type of control measure used	--	--
h. Roadway & Site Cleaning	Opacity	Dust supptessants, wetting agents	<40%			

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<b>F2 Ancillary Piping Components</b> [R18-2-730.F]	VOC	- No control	*	- Log status of visual inspection monthly  - Record the date the leak was detected & the dates of repairing the leak	--	--
<b>F3 Abrasive Blasting</b> [R18-2-726, 702.B]	Opacity	- Wet blasting, enclosures with dust collection device or alternative abrasive medium	< 40 %	- Date, duration of project; - Control measures used	--	--
<b>F4 Spray Painting</b> [R18-2-727, 702.B, Applicable SIP R9-3-527.C]	VOC	- 96% capture except for arch. coating and spot painting, dispose < 1.5 gallons	*	- Date, duration of project; - Control measure used, - MSDS of paints	--	--
	Opacity	--	< 40%	--	--	--

**Note:**

- (1) HAPs are emitted in trace quantities.
- (2) \* : No limits established
- (3) -- : Not required.
- (4) 1 : Semi-annual compliance certification required for all permitted equipment

**ATTACHMENT "A": GENERAL PROVISIONS**

Air Quality Control Permit No. 1000178

for

***ALL AMERICAN PIPELINE COMPANY - Hot Springs Pump Station***

**I. PERMIT EXPIRATION AND RENEWAL** [A.R.S. § 49-426.F, A.A.C. R18-2-304.C.2 and 306.A.1]

- A. This permit is valid for a period of five years from the date of issuance of the permit.
- B. The Permittee shall submit an application for renewal of this permit at least 6 months, but not more than 18 months prior to the date of permit expiration.

**II. COMPLIANCE WITH PERMIT CONDITIONS** [A.A.C. R18-2-306.A.8]

- A. The Permittee shall comply with all conditions of this permit including all applicable requirements of Arizona air quality statutes and the air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance of any federally enforceable requirement constitutes a violation of the Clean Air Act.
- B. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE** [A.A.C. R18-2-306.A.8.c, 321]

- A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination; or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- B. The permit shall be reopened and revised under any of the following circumstances:
  - 1. Additional applicable requirements under the Act become applicable to the class I source. Such reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to R18-2-322(B). Any permit revision required pursuant to this subparagraph shall comply with provisions in R18-2-322 for permit renewal and shall reset the five year permit term.
  - 2. Additional requirements, including excess emissions requirements, become applicable

to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit.

3. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
4. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.
5. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall, except for reopenings under paragraph 1 above, affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

**IV. POSTING OF PERMIT**

[A.A.C. R18-2-315]

- A. Permittee shall post such permit, or a certificate of permit issuance on location where the equipment is installed in such a manner as to be clearly visible and accessible. All equipment covered by the permit shall be clearly marked with one of the following:
  1. Current permit number.
  2. Serial number or other equipment number that is also listed in the permit to identify that piece of equipment.
- B. A copy of the complete permit shall be kept on the site.

**V. FEE PAYMENT**

[A.A.C. R18-2-326; 306.A.9.]

Permittee shall pay fees to the Director pursuant to A.R.S. § 49-426(E) and A.A.C. R18-2-326.

**VI. ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE**

[A.A.C. R18-2-327]

- A. Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31 or ninety days after the Director makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.
- B. The questionnaire shall be on a form provided by the Director and shall include the information required by A.A.C. R18-2-327.

**VII. COMPLIANCE CERTIFICATION**

[A.A.C. R18-2-309.2.c, 306.A.5]

- A. Permittee shall submit a compliance certification to the Director twice each year, which describes the compliance status of the source with respect to each permit condition. The first certification



shall be submitted no later than April 15th, and shall report the compliance status of the source during the period between September 16th of the previous year, and March 15th of the current year. The second certification shall be submitted no later than October 15th, and shall report the compliance status of the source during the period between March 16th and September 15th of the current year.

The compliance certification shall include the following:

1. Identification of each term or condition of the permit that is the basis of the certification;
  2. Compliance status of each applicable requirement;
  3. Whether compliance was continuous or intermittent;
  4. Method(s) used for determining the compliance status of the source, currently and over the reporting period;
  5. All instances of deviations from permit requirements reported pursuant to Section XI.B of this attachment; and
  6. A progress report on all compliance schedules submitted pursuant to Section XI.C of this Attachment.
- B. A copy of all compliance certifications for Class I permits shall also be submitted to the EPA Administrator.

**VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS** [A.A.C. R18-2-309.3]

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this part shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

**IX. INSPECTION AND ENTRY** [A.A.C. R18-2-309.4]

The Permittee shall allow the Director or the authorized representative of the Director upon presentation of proper credentials to:

- A. Enter upon the permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- E. Record any inspection by use of written, electronic, magnetic and photographic media.

**X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD**

[A.A.C. R18-2-304.C]

If this source becomes subject to a standard promulgated by the Administrator pursuant to section 112(d) of the Act, then the permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

**XI. PERMIT DEVIATION REPORTING**

**A. EXCESS EMISSIONS REPORTING** [A.A.C. R18-2-306.A.5.b, 306.E.3.d and 310]

- 1. Emissions in excess of an applicable emission limitation contained in Section I of Attachment "B" of this permit shall constitute a violation. For all situations that constitute an emergency as defined in R18-2-306(E), the affirmative defense and reporting requirements contained in that provision shall apply.
- 2. It shall be the burden of the permittee to demonstrate, through submission of the data and information required by this section, that all reasonable and practicable measures within the permittee's control were implemented to prevent the occurrence of excess emissions.
- 3. Excess emissions shall be reported as follows:
  - a. The permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:
    - (1) Notification by telephone or facsimile within 24 hours of the time when the permittee first learned of the occurrence of excess emissions including all available information from paragraph b. of this subsection.
    - (2) Detailed written notification within 72 hours of the notification pursuant to subparagraph (1) of this paragraph.
  - b. Report shall contain the following information:
    - (1) Identity of each stack or other emission point where the excess emissions occurred.
    - (2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions.

- (3) Date, time and duration or expected duration of the excess emissions.
  - (4) Identity of the equipment from which the excess emissions emanated.
  - (5) Nature and cause of such emissions.
  - (6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions.
  - (7) Steps taken to limit the excess emissions. If the source's permit contains procedures governing source operation during periods of start-up or malfunction and the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures.
4. In the case of continuous or recurring excess emissions, the notification requirements of this section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to subsection A.3.a.(2) of this Section.
5. EMERGENCY PROVISION [A.A.C. R18-2-306.E]
  - a. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
  - b. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of paragraph d of this section are met.
  - c. The permittee shall submit notice of the emergency to the Director by certified mail, facsimile or hand delivery within 2 working days of the time when emission limitations were exceeded due to an emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.
  - d. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
    - (1) An emergency occurred and that the permittee can identify the cause(s)

of the emergency;

- (2) The permitted facility was at the time being properly operated;
  - (3) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - (4) The notice was submitted per paragraph c. above.
- e. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
  - f. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

**B. OTHER PERMIT DEVIATIONS**

[A.A.C. R18-2-306.A.5 and 6, 306.E.3.d.]

Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Prompt reporting shall mean that the report was submitted to the Director by certified mail, facsimile, or hand delivery within two working days of the time the deviation occurred.

**C. COMPLIANCE SCHEDULE**

For any episode of non-compliance that is reported pursuant to XI.A and XI.B above, and that cannot be corrected within 72 hours, the Permittee is required to submit a compliance schedule to the Director within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or conditions that have been violated.

**XII. RECORD KEEPING REQUIREMENTS**

[A.A.C. R18-2-306.A.4]

- A. Permittee shall keep records of all required monitoring information including, but not limited to, the following:
  - 1. The date, place as defined in the permit, and time of sampling or measurements;
  - 2. The date(s) analyses were performed;
  - 3. The name of the company or entity that performed the analyses;
  - 4. A description of the analytical techniques or methods used;
  - 5. The results of such analyses; and

6. The operating conditions as existing at the time of sampling or measurement.

- B. Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

### **XIII. REPORTING REQUIREMENTS**

[A.A.C. R18-2-306.A.5.a]

Permittee shall submit reports of any required reporting as specified in Attachment "B" to this permit.

### **XIV. DUTY TO PROVIDE INFORMATION**

[A.A.C. R18-2-304.G and 306.A.8.e]

- A. The Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.
- B. If the Permittee has failed to submit any relevant facts or if the permittee has submitted incorrect information in the permit application, the permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

### **XV. PERMIT AMENDMENT OR REVISION**

[A.A.C. R18-2-318, 319 and 320]

Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under Section XVI, as follows:

- A. Administrative Permit Amendment (A.A.C. R18-2-318);
- B. Minor Permit Revision (A.A.C. R18-2-319);
- C. Significant Permit Revision (A.A.C. R18-2-320).

The applicability and requirements for such action are defined in the above referenced regulations.

### **XVI. FACILITY CHANGE WITHOUT PERMIT REVISION**

[A.A.C. R18-2-317]

- A. Permittee may make changes at the permitted source without a permit revision if all of the following apply:

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**All American Pipeline Company - Hot Springs Pump Station**

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1. The changes are not modifications under any provision of Title I of the Act or under A.R.S. § 49-401.01(17).
  2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions.
  3. The changes do not violate any applicable requirements or trigger any additional applicable requirements.
  4. The changes satisfy all requirements for a minor permit revision under R18-2-319(A).
  5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
- B. The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of subsections (A) and (C) of this Section.
- C. For each such change under subsections A and B of this Section, a written notice by certified mail or hand delivery shall be received by the Director and, for Class I permits, the Administrator, a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change but must be provided as far in advance of the change as possible or, if advance notification is not practicable, as soon after the change as possible. Changes that meet the criteria listed in subsections A, B, and C.1. of this Section are exempt from the notification requirements.
1. Examples of changes that do not require notification:
    - a. Changes that are not physical changes or changes in the method of operation of a source and that do not have the potential to affect emissions of regulated pollutants;
    - b. Routine maintenance activities; and
    - c. Changes to activities that are insignificant under A.A.C. R18-2-101.54 or as listed as trivial by the Administrator or the Director.
  2. Each notification shall include:
    - a. When the proposed change will occur.
    - b. A description of each such change.
    - c. Any change in emissions of regulated air pollutants.
    - d. The pollutants emitted subject to the emissions trade, if any.

- e. The provisions in the implementation plan that provide for the emissions trade with which the source will comply and any other information as may be required by the provisions in the implementation plan authorizing the trade.
- f. If the emissions trading provisions of the implementation plan are invoked, then the permit requirements with which the source will comply.
- g. Any permit term or condition that is no longer applicable as a result of the change.

## **XVII. TESTING REQUIREMENTS**

[A.A.C.R18-2-312]

### **A. Production Rates**

Tests shall be conducted during operation at the normal rated capacity of each unit, while operating at representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the Director, testing may be performed at a lower rate.

### **B. Operational Conditions During Testing**

Performance tests shall reflect representative operational conditions of the plant. Operations during start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative operational conditions.

### **C. Test Plan**

At least 14 calendar days prior to performing a test, the owner or operator shall submit a test plan to the Director, in accordance with A.A.C. R18-2-312.B and the Arizona Testing Manual. This test plan must include the following:

- 1. test duration;
- 2. test location(s);
- 3. test method(s); and
- 4. source operation and other parameters that may affect test results.

### **D. Stack Sampling Facilities**

Permittee shall provide or cause to be provided, performance testing facilities as follows:

- 1. Sampling ports adequate for test methods applicable to the facility;
- 2. Safe sampling platforms;
- 3. Safe access to sampling platforms; and
- 4. Utilities for sampling and testing equipment.

### **E. Interpretation of Final Results**

Each performance test shall consist of three separate runs using the required test method. Each

run shall be conducted in accordance with the applicable standard and test method. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. If a sample is accidentally lost or conditions occur which are not under the permittee's control and which may invalidate the run, compliance may, upon the Director's approval, be determined using the arithmetic mean of the other two runs.

**F. Report of Final Test Results**

A written report of the results of all performance tests shall be submitted to the Director within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

**G. Cessation of Testing After the First Run has Started**

If the Director or the Director's designee is not present, tests may only be stopped for good cause. Good cause includes, forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions or other conditions beyond the permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation which demonstrates good cause must be submitted.

**XVIII. PROPERTY RIGHTS**

[A.A.C. R18-2-306.A.8.d]

This permit does not convey any property rights of any sort, or any exclusive privilege.

**XIX. SEVERABILITY CLAUSE**

[A.A.C. R18-2-306.A.7]

The provisions of this permit are severable, if any provision of this permit is held invalid, the remainder of this permit shall not be affected thereby.

**XX. PERMIT SHIELD**

[A.A.C. R18-2-325]

Compliance with the conditions of this permit shall be deemed compliance with any applicable requirement as of the date of permit issuance, provided that such applicable requirements are included and expressly identified in this permit.



**ATTACHMENT "B": SPECIFIC CONDITIONS**

Air Quality Control Permit No. 1000178

For

***ALL AMERICAN PIPELINE COMPANY - Hot Springs Pump Station***

**I. EMISSION LIMITS / STANDARDS**

**A. Natural Gas-Fired Solar Centaur Turbine Engines**

1. Nitrogen Oxides [40 CFR 60.332]

Permittee shall not cause to be discharged into the atmosphere from the stack of any Solar Centaur T-4000 turbine engines, any gases which contain nitrogen oxides in excess of:

$$\text{STD} = \frac{0.0150 * (14.4) + F}{Y}$$

where:

STD = allowable NO<sub>x</sub> emissions (percent by volume at 15 percent oxygen and on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO<sub>x</sub> emission allowance for fuel-bound nitrogen as defined in 40 CFR 60.332(a)(3).

2. Sulfur Dioxide [40 CFR 60.333]

The sulfur content of the fuel shall not exceed 0.8 percent by weight.

3. Permittee shall not operate more than two natural gas-fired Solar Centaur T-4000 turbine engines at any given time, except for 15 minutes to switch to the third turbine. The number of switches between units shall not exceed 3,650 per year, based on a 12-month rolling total. [40 CFR 52.21]

*[This is a material permit condition]*

4. Permittee shall not operate the gas-fired Solar Centaur T-4000 turbine engines such that the pumping capacity exceeds 70 percent at any time. [40 CFR 60.8]

5. Fuel Limitation [A.A.C.R18-2-306.01]

Permittee is permitted to burn only pipeline quality natural gas in any gas turbine.

*[This is a material permit condition]*

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## All American Pipeline Company - Hot Springs Pump Station

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6. At all times, including periods of startup, shutdown, and malfunction, Permittee shall, to the extent practicable, maintain and operate any Solar Centaur T-4000 turbine engines in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 CFR 60.11(d)]

### B. G. C. Broach Heaters

1. Particulate Matter

[A.A.C. R18-2-724.C.1]

Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from the two G.C. Broach heaters in excess of the amounts calculated by the following equation:

$$E = 1.02Q^{0.769}$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

Q = the heat input in million Btu per hour.

2. Opacity Standard

[A.A.C.R18-2-724.J]

Permittee shall not cause, allow or permit to be emitted into the atmosphere from G.C. Broach heaters, smoke which exceeds 15 percent opacity in any six-minute period.

3. Fuel Limitation

[A.A.C.R18-2-306.01]

Permittee is permitted to burn only pipeline quality natural gas in any G.C. Broach heaters.

### C. Non-Point Sources

1. Open Areas, Roadways & Streets, Storage Piles, and Material Handling

- a. Permittee shall not cause, allow or permit visible emissions from open areas, roadways and streets, storage piles or material handling in excess of 40 % opacity as measured by EPA Reference Method 9. [A.A.C. R18-2-610]

- b. Permittee shall employ the following methods to prevent excessive amounts of particulate matter from becoming airborne:

- (1) Continue to maintain gravel on driveways, parking areas, and vacant lots where motor vehicular activity occurs; [A.A.C.R18-2-604.A]

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**All American Pipeline Company - Hot Springs Pump Station**

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- (2) Use adequate dust suppressants or wetting agents on open areas during construction operations, repair operations, demolition activities, clearing operations, and leveling operations, or when any earth is moved or excavated;  
[A.A.C.R18-2-604.A]
- (3) Use adequate dust suppressants or wetting agents when a roadway is repaired, constructed, or reconstructed;  
[A.A.C.R18-2-605.A]
- (4) Use dust suppressants, wetting agents, or cover the load adequately when transporting material likely to give rise to airborne dust;  
[A.A.C.R18-2-605.B, 606]
- (5) Use spray bars, wetting agents or dust suppressants when crushing, handling, or conveying material that is likely to give rise to airborne dust;  
[A.A.C.R18-2-606]
- (6) Adequately cover, or use wetting agents or dust suppressants when stacking, piling, or otherwise storing organic or inorganic dust producing material; and  
[A.A.C.R18-2-607.A]
- (7) Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material and with the use of spray bars and wetting agents.  
[A.A.C.R18-2-607.B]

2. Open Burning [A.A.C.R18-2-602]

Permittee shall not conduct open burning except when permitted to do so by either ADEQ or the local officer delegated the authority for issuance of open burning permits.

D. Other Periodic Activities

1. Abrasive Blasting [A.A.C. R18-2-726, 306.01]

- a. Permittee shall not cause or allow sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Good modern practices are:
  - (1) wet blasting; or
  - (2) effective enclosures with necessary dust collecting equipment; or
  - (3) hydroblasting; or
  - (4) vacuum blasting; or
  - (5) dry abrasive blasting using California Air Resources Board (CARB) “certified” abrasives (CARB Executive Order G-94-054).
- b. Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations in excess of 40% opacity as measured by EPA

Reference Method 9.

[A.A.C. R18-2-702.B]

2. Use of Paints

- a. Permittee shall conduct or cause to be conducted spray painting operations within an enclosed area equipped with controls containing no less than 96 percent of the overspray in order to minimize organic solvent emissions. Architectural coating and spot painting shall be exempted from this requirement.

[A.A.C.R18-2-727.A]

- b. Permittee or his designated contractor shall not either:

- (1) Employ, apply, evaporate or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or
- (2) Thin or dilute any architectural coating with a photochemically reactive solvent.

[A.A.C.R18-2-727.B]

- c. For the purposes of parts b. and e. of this condition, a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in paragraphs (1) through (3) of this subsection, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

- (1) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation - hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones : five percent
- (2) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: eight percent
- (3) A combination of ethylbenzene, ketones having branched structures, trichloroethylene or toluene: 20 percent

[A.A.C.R18-2-727.C]

- d. Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups or organic compounds described in subsection c(1) through c(3) of this condition, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.

[A.A.C.R18-2-727.D]

- e. Permittee shall not dispose by evaporation more than 1.5 gallons of photochemically reactive solvent in any one day.

[SIP Provision R9-3-527.C]

- f. Visible emissions from spray painting operations shall not have an opacity of greater than 40%, as measured by EPA reference Method 9.

[A.A.C.R18-2-702.B]

E. Ancillary Piping Components

[A.A.C. R18-2-730.F]

Permittee shall operate all valves, relief valves, pump seals, flanges and connections in such a manner and by such means that they will not leak, or otherwise cause emissions to be discharged into the ambient air so as to cause or contribute to air pollution.

**II. MONITORING & RECORDKEEPING REQUIREMENTS**

[40 CFR 60.7 (b)]

A. Fuel Sulfur Content

[40 CFR 60.334]

Permittee shall monitor and record daily, the sulfur content in the fuel being combusted in any natural gas-fired Solar Centaur T-4000 turbine engines. This requirement may be complied with by one of the following:

1. Maintaining a copy of that part of the Federal Energy Regulatory Commission (FERC)-approved Tariff agreement that limits transmission to pipeline quality natural gas of sulfur content less than 0.8 percent by weight; or
2. Using the following custom fuel monitoring schedule:
  - a. Permittee shall, beginning on a bi-monthly schedule, sample and analyze the fuel gas for sulfur content. After a period of 6 months, if the results demonstrate compliance with 40 CFR 60.333, the sampling frequency may be decreased to quarterly. After another period of 6 months, if the quarterly results demonstrate compliance with 40 CFR 60.333, the sampling frequency may be decreased to semiannually.
  - b. Permittee shall retain all records of sample analysis and fuel supply pertinent to this custom schedule. Analysis for fuel sulfur content of the natural gas should be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are: ASTM D1072-88; ASTM D3031-81; ASTM D3246-81; and ASTM D4084-82 as referenced in 40 CFR 60.335(d).
  - c. If any sulfur analysis as required in item 2(a) above indicate noncompliance with 40 CFR 60.333, Permittee shall record such excess emissions and the custom schedule shall be re-examined by the Environmental Protection Agency. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.

B. Fuel Nitrogen Content

[40 CFR 60.334]

Permittee shall monitor daily, the nitrogen content of the fuel being fired in the turbine.

The requirement to monitor the fuel nitrogen content has been **waived** as per EPA Memorandum Authority for Approval of Custom Fuel monitoring Schedules Under NSPS Subpart GG, August

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14, 1987. Number 1 of the enclosure states:

“Monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel fired in the gas turbine.”

- C. Permittee shall monitor and record the quantity of crude oil pumped through the pipeline at the facility, and determine the percent capacity achieved, on a daily basis.
- D. Permittee shall log in ink, a record of the date and times of start-up/shutdown for each turbine, and a record of the number of switches between the units on a daily basis. Alternatively, Permittee shall propose for Department review an electronic data capture and recording system which would document the above information.
- E. Fuel Heating Value [A.A.C. R18-2-724]

Permittee shall monitor and record daily, the heating value of the fuel being combusted in any natural gas-fired C.G. Broach heaters. This requirement may be complied by maintaining a copy of the Federal Energy Regulatory Commission (FERC)-approved Tariff agreement that limits transmission to pipeline quality natural gas of having a heating value greater than or equal to 967 Btu/ft<sup>3</sup>.

F. Non-Point Sources

1. Open Areas, Roadways & Streets, Storage Piles and Material Handling

Permittee shall maintain records of the following

- a. Dates gravel maintenance activities were performed in order to comply with the requirements of I.C.1.b.(1).
- b. Dates on which any of the activities listed in I.C.1.b.(2) are performed, and control measures adopted.
- c. Dates on which any of the activities listed in I.C.1.b.(3) are performed, and control measures adopted.
- d. Dates on which any of the activity listed in I.C.1.b.(4) is performed, and control measures adopted.
- e. Dates on which any of the activities listed in I.C.1.b.(5) are performed, and control measures adopted.
- f. Dates on which any of the activities listed in I.C.1.b.(6) are performed, and control measures adopted.
- g. Dates on which any of the activities listed in I.C.1.b.(7) are performed, and control measures adopted.

2. Open Burning

Permittee shall obtain and maintain on file an open burn permit prior to conducting an open burn.

G. Other Periodic Activities

1. Abrasive Blasting

Each time an abrasive blasting project is conducted, Permittee shall log in ink, a record of the following:

- a. The date the project was conducted
- b. The duration of the project
- c. Type of control measures employed

2. Use of Paints

- a. Each time a spray painting project is conducted, Permittee shall log in ink, a record of the following:

- (1) The date the project was conducted
- (2) The duration of the project
- (3) The type of control measures employed
- (4) The Material Safety Data Sheets for all paints and solvents used in the project

- b. Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of part a. above.

H. Ancillary Piping Components

1. Permittee shall check each valve, relief valve, pump seal, flange and connection by visual inspection and log the status once every month. If a leak is detected, it shall be repaired within 15 calendar days of detecting the leak.
2. Permittee shall record the date the leak was detected and the dates of each attempt to repair the leak.

- I. For the purpose of reports required under excess emissions reporting required by A.A.C. R18-2-310, Permittee shall record all six-minute periods in which the opacity of any plume or effluent exceeds 15 percent from the heater.  
[A.A.C. R18-2-724.J]

J. Location of Records

Permittee may retain all records relating to this permit and a copy of the permit at:

All American Pipeline Company

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## **All American Pipeline Company - Hot Springs Pump Station**

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220 North William Dillard Drive  
Gilbert, Arizona 85233

Permittee shall comply with the permit posting requirements of Attachment "A", section IV. Records shall be maintained in a log and in accordance with the requirements of Section XII.B of Attachment "A".

### **III. REPORTING REQUIREMENTS**

[A.A.C. R18-2-306.A.5.a.]

#### **A. Fuel Sulfur Content**

1. If Section II.A.1 of this Attachment is used to determine compliance with fuel sulfur content, Permittee shall notify the Director in writing within 30 days of any change to that part of the FERC-approved Tariff agreement relating to the fuel sulfur content and low heating value limits that occur during the term of this permit.
2. If Section II.A.2 of this Attachment is used to determine compliance with fuel sulfur content, Permittee shall notify the Director in writing within 30 days of any change in fuel supply or any change in fuel quality.
3. If any sulfur analysis as required in Section II.A.2(a) indicate noncompliance with 40 CFR 60.333, Permittee shall notify the Department and U.S. EPA of such excess emissions pursuant to Section XI of Attachment A.

#### **B. Permittee shall submit following reports of semiannually:**

1. Reports of required monitoring in Section II.C of this Attachment.
2. Monthly summary reports of 12-month rolling record of switches between operating turbine units, including the identification of run-up, operation, and run-down period by turbine, date and time for each switch.

#### **C. Permittee shall submit compliance certifications pursuant to Section VII of Attachment "A".**

- D. For the purpose of reports required under excess emissions reporting required by A.A.C. R18-2-310, Permittee shall report all six-minute periods in which the opacity of any plume or effluent exceeds 15 percent from the heater.

[A.A.C. R18-2-724.J]

### **IV. TESTING REQUIREMENTS**

[40 CFR 60.8, 60.335]

- A. Permittee shall conduct or cause to be conducted an annual performance test on each of turbine engine for Nitrogen Oxide (NO<sub>x</sub>) emissions. Each annual test shall be completed prior to each anniversary date of this permit issuance. Test method specified in Section IV.B. of this Attachment shall be used.
- B. EPA Reference Method 20, or other equivalent test method with prior approval from the Director, shall be used to determine emissions of nitrogen oxides from the stationary gas turbine engines.



**ATTACHMENT "C": APPLICABLE REQUIREMENTS**

Air Quality Control Permit No. 1000178

For

***ALL AMERICAN PIPELINE COMPANY - Hot Springs Pump Station***

**REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE**

Following is a list of the federally applicable requirements:

**ARIZONA ADMINISTRATIVE CODE (A.A.C.) TITLE 18, Chapter 2**

**ARTICLE 6. EMISSIONS FROM EXISTING AND NEW NONPOINT SOURCES**

R18-2-601	General
R18-2-602	Unlawful open burning
R18-2-604	Open areas, dry washes, or riverbeds
R18-2-605	Roadways and streets
R18-2-606	Material handling
R18-2-610	Evaluation of nonpoint source emissions

**ARTICLE 7. EXISTING STATIONARY SOURCE PERFORMANCE STANDARDS**

R18-2-702.B	General provisions
R18-2-724.C.1	Standard of performance for fossil-fuel fired industrial and commercial equipment
R18-2-724.J	Standard of performance for fossil-fuel fired industrial and commercial equipment
R18-2-726	Standards of performance for sandblasting operations
R18-2-727	Standards of performance for spray painting operations
R18-2-730	Standards of performance for unclassified sources
SIP R9-3-527.C	Standards of performance for spray painting operations

**ARTICLE 9. NEW SOURCE PERFORMANCE STANDARDS**

R18-2-901.1	(40 CFR 60.1 - 60.18 [Subpart A]) General Provisions
R18-2-901.38	(40 CFR 60.330 - 60.335 [Subpart GG]) Standards of performance for stationary gas turbines

**ATTACHMENT "D": EQUIPMENT LIST**

Air Quality Control Permit No. 1000178

For

***ALL AMERICAN PIPELINE COMPANY - Hot Springs Pump Station***

<b>PERMITTED EQUIPMENT</b>					
<b>Equipment/ Emission Unit I.D.</b>	<b>Description</b>	<b>Size</b>	<b>Serial Number</b>	<b>Model</b>	<b>Date of manufacture</b>
P1 <sup>(a)</sup>	Natural gas-fired Solar Centaur Turbine Engine	3,800 hp / 36 MMBtu/hr	4098C41	Solar Centaur T-4000	December, 1986
P2 <sup>(a)</sup>	Natural gas-fired Solar Centaur Turbine Engine	3,800 hp / 36 MMBtu/hr	4081C41	Solar Centaur T-4000	December, 1986
P3 <sup>(a)</sup>	Natural gas-fired Solar Centaur Turbine Engine	3,800 hp / 36 MMBtu/hr	4077C41	Solar Centaur T-4000	December, 1986
P4	Natural gas-fired G.C. Broach Heater	43.4 MM Btu/hr	84920-K1	TEGHFD-40	April, 1986
P5	Natural gas-fired G.C. Broach Heater	43.4 MM Btu/hr	84920-K2	TEGHFD-40	April, 1986
F1	Non-point sources	-	-	-	-
F2	Ancillary Piping Components	-	-	-	-
F3	Abrasive Sandblasting	-	-	-	-
F4	Spray Painting	-	-	-	-

<sup>(a)</sup> : Only two of the three natural gas-fired Solar Centaur turbine engines can be operated at any given time, except for 15 minutes to switch between units..

**ATTACHMENT "E": INSIGNIFICANT ACTIVITIES**

Air Quality Control Permit No. 1000178

For

***ALL AMERICAN PIPELINE COMPANY - Hot Springs Pump Station***

POTENTIAL EMISSION POINTS CLASSIFIED AS "INSIGNIFICANT ACTIVITIES" PURSUANT TO  
A.A.C. R18-2-101.54

<b>No.</b>	<b>Description</b>
1	Internal combustion (IC) engine-driven electrical generator sets used for emergency replacement or standby service
2	Scraper receiving and launching
3	Biocide tanks (Not to exceed 400 gallons in capacity)
4	50 gallon buried sump tanks
5	Electric pumps
6	General plant maintenance and upkeep activities not associated with Permittee's primary business activity, and not otherwise triggering a permit modification.